CRITICAL NOTES ON SYRPHIDÆ

By FREDERICK KNAB

Baccha cylindrica Fabr.

Syrphus cylindricus Fabricus, 1781, Spec. Ins., vol. 2, p. 429.
Baccha cylindrica Fabricius, 1805, Syst. Antliat., p. 199.
Baccha cylindrica Wiedemann, 1830, Aussereurop. zweifl. Ins., vol. 2, p. 92.
Ocyptamus conformis Loew, 1866, Berlin. Ent. Zeitschr., vol. 10, p. 38.
Ocyptamus fascipennis V. d. Wulp (not Wiedemann, not Macquart), 1883, Tijdschr. v. Ent., vol. 26, p. 9.
Ocyptamus conformis v. Roeder, 1885, Stettin. Ent. Zeit., vol. 46, p. 342.
Baccha fuscipennis Williston (in part, not Say), 1886, Synopsis No. Amer. Syrph., p. 119.
Ocyptamus fuscipennis Townsend (not Say), 1895, Trans. Amer. Ent. Soc., vol. 22, p. 39.

The synonymy above indicated shows that the status of this species is not clearly established. It is evident from the literature that *Baccha cylindrica* was not clearly differentiated from *B. fuscipennis,* recent authors considering them as conspecific. They are, however, abundantly distinct, although this is not apparent from the wing-pattern, the feature which has chiefly engaged systematists. The identity of the Fabrician species seems to have been neither suspected nor investigated, although Wiedemann gives an excellent description from the type.

Baccha cylindrica has the wings extensively deep blackish brown; there is a large purely hyaline spot apically, bounded anteriorly by the third vein and occupying the distal half of the subapical cell and the parts beyond; there is a large hyaline streak in the discal cell and a smaller clear spot at the distal end of the second basal cell; the axillary area is wholly clear. The face is wholly pale yellow, this color extending upward at the sides of the frons in long triangles. The third antennal joint is wholly black. The abdomen is steely blue, moderately shining, the second, third, and fourth segments with broad velvet-black bands, somewhat broader and more remote from hind margins than in *fuscipennis,* that on the fourth segment

very broad. Posterior third of fifth segment and all of sixth and seventh highly polished, bright steel-blue. Legs, including coxæ, deep black, the femora bright yellow at base, the hindmost pair narrowly so, the others to well beyond the middle.

Four specimens representing both sexes, two from Santo Domingo and two from Porto Rico, are before me. One female has the hyaline portion in the middle of the wing extending from the discal cell to the inner margin. In all other details the specimens agree closely.

Baccha cylindrica appears to be exclusively Antillean. Certain specimens from the southern United States closely approach it in wing-pattern and at first glance one would pronounce them conspecific; but other characters show that they really belong to *Baccha fuscipennis*. Typical specimens of this latter species have the wings heavily and uniformly infuscated, showing only a more or less clear apical spot in the position above described for *cylindrica*. In some Florida specimens the hyaline is still more extensive, being broadly continuous from the discal cell along the inner margin to the base of the wing. This is the form described and rudely figured by Macquart under the name *Ocyptamus fascipennis* (Hist. Nat. Ins., Dipt., 1834, vol. 1, p. 554, pl. 12, fig. 13), from a specimen coming from Philadelphia.

Baccha fuscipennis, in spite of the variation in wing-pattern, may be readily distinguished from *cylindrica* by the following differences which a large series shows to be constant: The third antennal joint on its inner side has a yellow spot at base below. The legs are dull yellow shading to pale brown, the femora showing very faint subapical darker bands. The abdomen is yellow-brown, the second to fifth segments with subapical ill-defined dull black bands, that on the fourth segment less extensive than in *cylindrica*.

Eristalis meigenii Wied.

Eristalis meigenii Wiedemann, 1830, Aussereurop. zweifl. Ins., vol. 2, p. 177, pl. 10*b*, fig. 15.

Eristalis meigenii Arribálzaga, 1892, Anal. Soc. Cient. Argent., vol. 34, p. 115.

This species has been misidentified by North American systematists and is strictly South American. The peculiar distribution indicated by the records, the La Plata region and the sub-boreal portions of North America, appeared improbable and led the writer to look up the original description. It at once became clear that the true *meigenii,* although showing much the same general coloration as the North American species passing under this name, is amply distinct, being, indeed, more closely related to certain neotropical species.

This is apparent from Wiedemann's description of the scutellum of his *meigenii:* "Schildchen mitten breit wachsgelb, an den Seiten schwarz." (Scutellum broadly wax-yellow in the middle, black at the sides.) Now, by no stretch of the imagination can the scutellum of our species be called "wax-yellow," while the term would be very apt for such species as *scutellaris,* to which latter we find Wiedemann actually applying the same term. Nor is there any trace of black at the sides of the scutellum of *brousii* (for we might as well call our species by its correct name). The scutellum of *brousii* is brown, "subtranslucent yellowish or reddish on the outer part." It is thick and convex and its whole surface is rather densely clothed with fine long hairs. On the other hand, we have in the group of neotropical species above referred to a flat broad scutellum nearly bare on the disk. There is a whole series of such species with flat wax-yellow scutellum and with body coloration more or less resembling *meigenii. Eristalis scutellaris* Fabr. and *E. albifrons* Wied. are familiar examples of this group. Unfortunately the writer has been unable to procure specimens of the true *meigenii,* but if any doubt exists as to the above contention, the figure in Wiedemann's work, evidently generally overlooked, should prove convincing. Our North American species passing as *meigenii* will have to be known as *Eristalis brousii* Will.

Volucella incommoda, new species.

Male.—Eyes contiguous, very shortly white-pilose. Face and frontal triangle pellucid brownish yellow, unmarked, moderately prominent. Antennæ dull reddish yellow, the third

joint over twice as long as broad; arista yellowish, blackish on distal half, long-plumose. Mesonotum shining yellow-brown with violaceous reflections and with five indistinct darker longitudinal stripes; pubescence fine, black. Scutellum large and very prominent, convex at base and apically with a deep transverse median impression; color darker than mesonotum and with stronger violaceous luster; a series of rather coarse and dense, but short, black bristles along posterior margin. Pleuræ yellow-brown, shining. Abdomen broad, rounded, about as wide as long, shining, brownish yellow at base, beyond deep brown stained with black and with faint violaceous reflections. Legs brownish black, the knees narrowly dull yellow, the tarsi tinged with yellow on basal portions, the hind pair with the first joint deep ocher-yellow and ventrally with cushion of golden pile. Wings hyaline, the costal and subcostal cells dull yellow, a small dark brown spot at tip of first vein; second vein ending in the costa just beyond tip of first vein. Halteres ivory white. Length: Body about 7 mm., wing 8 mm.

Female.—Coloration similar to male. Frons about one-sixth the width of the head, deep shining black, yellow at extreme apex, clothed with short fine pale pile along the sides. Wings slightly broader than in the male, the second vein terminating farther beyond tip of first vein.

Ancon, Canal Zone, Panama, November, 1915, 8 specimens reared by L. H. Dunn from larvæ in decaying contents of a calabash.

Type, Cat. No. 20646, U. S. Nat. Mus.

This species varies somewhat in coloration, some specimens showing a more yellowish ground color and more distinct thoracic stripes, while others are very dark and show hardly a trace of yellow on the tarsi. The most interesting variation, however, occurs in the wing-venation. In two of the males the second vein terminates in the costa just beyond the tip of the first vein; in the third male the second vein ends in the first vein distinctly before the latter reaches the costa. This specimen would naturally be referred to the genus *Phalacromyia,* yet it is unquestionably conspecific with the other speci-